

PRESS RELEASE

Stubble Burning Not the Only Culprit for Air Pollution in Delhi, Say Experts

For Immediate Release

Bengaluru, 22 August 2025: Stubble burning is often blamed as the main cause of seasonal air pollution in Delhi NCR, but scientific evidence points to other factors, said Dr Shailesh Nayak, Director of the National Institute of Advanced Studies (NIAS) and former Secretary, Ministry of Earth Sciences. 'Even if we reduce crop burning to zero, pollution will still persist in Delhi due to other sources,' he noted.

Dr Nayak emphasised that full electrification of light and heavy commercial vehicles (LCVs and HCVs) in the region could significantly improve Delhi's air quality index (AQI), bringing it to satisfactory levels. He also cautioned against the direct adoption of WHO benchmarks in the Indian context: 'India cannot blindly apply Western standards, since our baseline itself is already higher than WHO levels. We must remain mindful of our own realities.'

He was speaking at the [India Clean Air Summit \(ICAS\) 2025](#), organised by the Center for Study of Science, Technology and Policy (CSTEP), a research-based think tank in Bengaluru.

Krunesh Garg, Chief Environmental Engineer and Former Member Secretary, Punjab Pollution Control Board, echoed the need for nuanced approaches, pointing out that the role of Punjab's stubble burning in Delhi's air quality is often overstated. 'A one-size-fits-all strategy does not work. We need a scientific understanding of regional pollution dynamics to frame effective policies,' he said. He highlighted the potential of low-cost sensor grids to capture localised data that can strengthen monitoring infrastructure and inform targeted interventions.

Adding an international perspective, Prof. Joshua Apte (Department of Civil and Environmental Engineering, UC Berkeley) shared insights from the SAMOSA-II project. Research showed that rural areas record higher pollution levels than urban sites, challenging the widespread belief that Delhi is the worst-affected hotspot. 'Effective control of rural emissions is critical for improving India's air quality,' he noted.

In his keynote address, Virinder Sharma, Member-Technical, Commission for Air Quality Management (CAQM), underlined the need for a multi-jurisdictional and multi-sectoral strategy. He also stressed on the importance of community engagement: 'Communicating to the public requires co-creation and co-designing with practitioners on the ground. We need to consider and cover people who are most impacted by air quality'. On vehicular emissions, he called for urgent action on BS III and BS IV vehicles, which emit far more pollutants than BS VI, and advocated for a mix of monitoring, stricter fuel standards, and faster adoption of electric vehicles.

Inaugurating ICAS 2025, Harish Hande, Co-Founder & CEO of SELCO Foundation, urged for a human-centric approach to development. He cautioned against

overreliance on data without context: 'Solutions for India must be end-user centric and rooted in local realities, not copied from developed countries.'

Prof. Chandra Venkataraman (Department of Chemical Engineering, IIT Bombay) drew attention to limitations in current clean air policies. She noted that the National Clean Air Programme (NCAP) focuses heavily on larger particles, whereas India's urban air quality is strongly shaped by regional sources, including agriculture, household emissions, and industry. She called for region-specific interventions tailored to India's diverse emission patterns.

ICAS 2025 also featured perspectives from leading experts including Prof. Sachchida Nand Tripathi (Dean, Kotak School of Sustainability, IIT Kanpur); Prof. Gufran Beig (NIAS); Shri Ashish Tiwari, IFS (ICIMOD); Prof. Srinidhi Balasubramanian (IIT Bombay); Prof. Spyros Pandis (University of Patras, Greece); Prof. Faye McNeill (Columbia University); Dr Vikas Singh (CAQM); Dr Gaurav Govardhan (Indian Institute of Tropical Meteorology); and Dr Santosh Harish (Open Philanthropy). Collectively, they stressed the urgency of collaborative, science-driven, and people-centric solutions to India's air pollution challenge.

As part of the Summit, CSTEP also unveiled two reports—[*Switch on, Smoke off: Reducing Emissions from Diesel Generator Sets*](#) and [*Heavy Duty, High Impact Mitigating Heavy Commercial Vehicle Emissions in India*](#)—and a new Policy-Relevant Air Quality Modelling (PRM) Dashboard, designed to support evidence-based policymaking by integrating science, data, and actionable insights.

For more details and interviews, please write to us at **cpe@cstep.in**

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About CSTEP: The Center for Study of Science, Technology and Policy (CSTEP) is one of India's leading think tanks, involved in solving Grand Challenges that the country faces. These include Sustainable and Secure Future, India's Green Energy Transition, Clean Air for All, and Digital Transformation.

About CSTEP's Air Quality Sector: We are working with state pollution control agencies and the Central Pollution Control Board to scientifically identify the sources of pollution for effective and targeted interventions. With the use of emerging technologies such as low-cost sensors, mobile monitoring, and satellite-based monitoring of air pollution, CSTEP is looking at ways to make data on air pollution comprehensive, robust, and accessible.